



16

Amd. Profile & Decks  
Swan Hunter & W.R.

• Nos 1661 & 1697.

29.7.41

T.C. 2.12.42

CITY OF BRISTOL \*

CITY OF MADRAS.

013470-013474-0065

1991 26 May



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Foundation

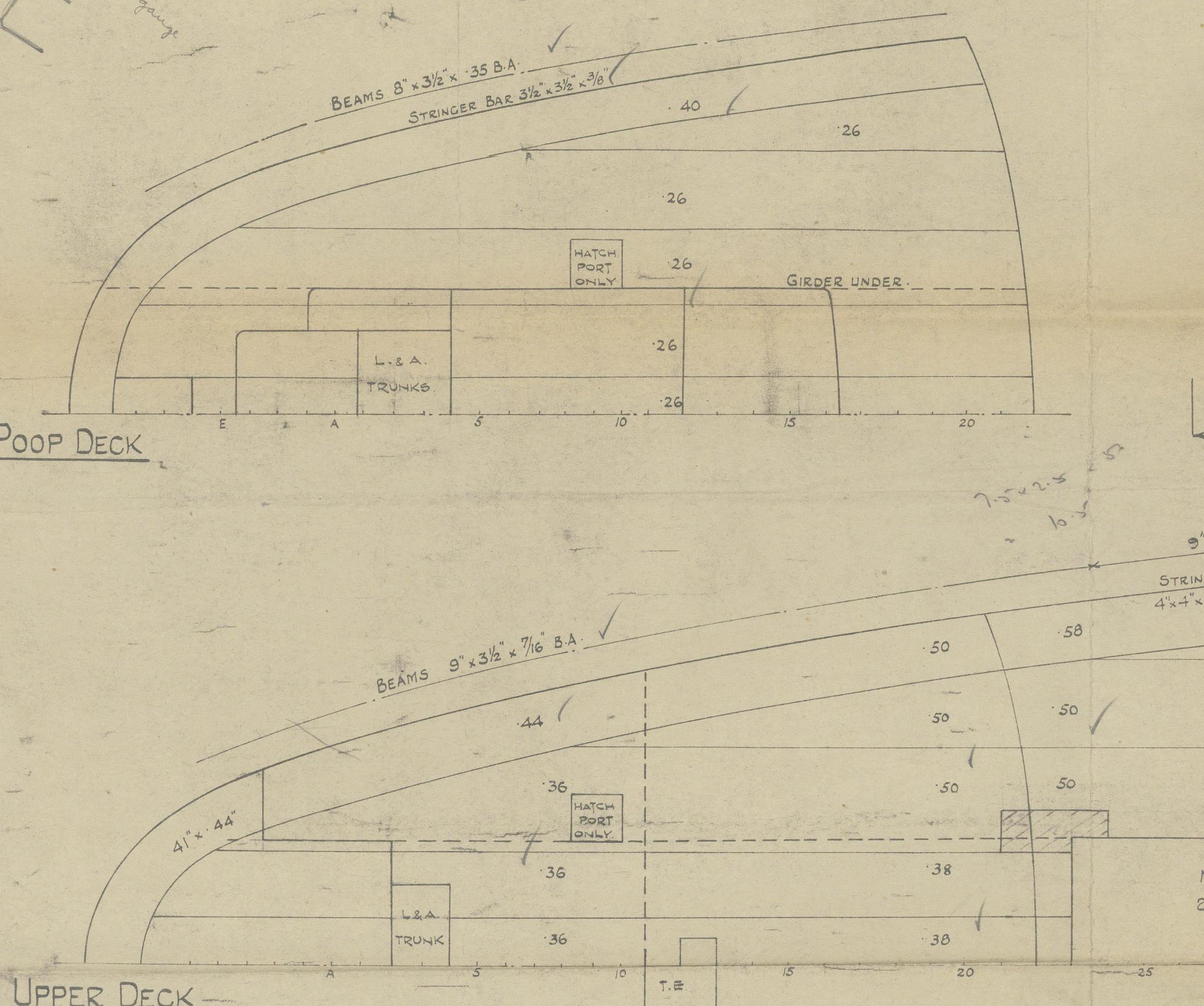


61 81697.

# FILE & DECKS.

E 1/8 INCH = 1

465'-0" B.P x 64'-0" x 37'-3" TO UPPER DECK.



28 JUL

28 JUL 1941

Midship Section  
Swan Hunter & W.R.

N<sup>o</sup>s 1661 x 1697      10.3.41  
T.C. 2.12.42.

CITY OF BRISTOL \*  
1651

CITY OF MADRAS. •

City of Bristol.

Section  
1661

013770-013774-0061



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Midship Section  
S. Haw R. 1661.

6 MAR 1941

Approved  
C. T. C.  
10/10/41

## SHIP N° 1661 &amp; 1697

## MIDSHIP SECTION.

SCALE : HALF INCH = ONE FOOT

MLD. DIMENSIONS 465'-0" x 64'-0" x 37'-5" TO UPPER DECK

TO CLAP.....SECTION CORPORATION D.P. \*

SECTION A.R.B. 1924 BRITISH STANDARD.

ITEM	L.D.W.	L.D.W. LAD.	REMARKS	
			UPPER	LOWER
KEEL	4' 0"	4' 0"		
SHIPS	4' 0"	4' 0"		
SHIPS PLATE	6	4		
STEAM BOIL. SHIPS TANK	4	3		
STEAM BOIL. TANK	4	3		
LAWNS	3	3		
TANK FOR CENTER OF GRAV.	3	3		
TANK FOR PLATING	3	3		
PLATING	3	3		
LOWER DECK PLATING	3	2		
MAIN DECK STEAM. CLEAR OF HATCHES	2	2		
MAIN DECK PLATING	2	2		
MAIN DECK STEAM. HATCHES	2	2		
UPPER DECK PLATES CLEAR OF HATCHES	5	5		
PLATING	5	5		
UPPER DECK PLATES CLEAR OF HATCHES	5	5		
PLATING	5	5		
UPPER DECK STEAM. HATCHES	5	5		
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PLATING</td				

H9

Rudder & Sternframe  
Swan Hunter & W.R.

No. 1697.

b. 1. 42

CITY OF MADRAS.

bag

L691 28 M 1998

NO 1697.

RUDDER & STERNFRAME.

SCALE -  $\frac{1}{2}$  = 1 FOOT

STERN FRAME OF CAST STEEL ✓  
RUDDER STOCK OF FORGED STEEL ✓  
ALL TO PASS BRITISH CORPORATION TESTS etc ✓  
AREA OF RUDDER ABAFT 4" OF PINTLES = 194 SQ INCH ✓  
CG OF RUDDER ABAFT 4" OF PINTLES = 5.03 INCH ✓  
= 16.25 INCHES INCLUDING - 10% ✓  
RULE DIA OF RUDDER HEAD = 162 KNOTS  
SPEED OF SHIP = 162 KNOTS

$$\text{Area} = 2325 \times 194 \times 803 \times 168^2 \\ = 2325 \times 3 \times 268 \times 180 \\ = 2325 \times 6.128 = 1498 + 1.108 \\ 1.108 \\ \text{Taper on Pintles } R = 1.12 \\ 16 \times 1.12 = 1.83 \text{ Yoke } 23$$

$$23 \times 64.48 = 148 \\ 16.28$$

R. Spacing of arms = 78" ✓

Gf = 72" ✓

Rd Pintles = 72" Gf = 72" 83" bearing bush. ✓

L. depth = 15' 16" Gf = 12.38 Gf = 11.78 SEE SEPARATE PLAN FOR RUDDER HEAD PARTICULARS

Bow Plate = 823 Gf = 62

Left Bearing Surface = 3x12.38x11.78 = 8725

$$\frac{25 \times 8.125 \times 13}{2} = 166 \\ 166 \\ \text{Rule} = 3 \times 22 \times 18 \times 12.38 = 8725 \\ 7 \times 12 \times 8.28 = 194 \\ 194 \\ 166.9$$

rule = 3x22x18x12.38 = 8725

$\frac{25 \times 8.125 \times 13}{2} = 166$

$\frac{166}{2} = 103.85$

$\frac{103.85}{12} = 8.65$

$\frac{8.65}{2} = 4.325$

$\frac{4.325}{2} = 2.1625$

$\frac{2.1625}{2} = 1.08125$

$\frac{1.08125}{2} = 0.540625$

$\frac{0.540625}{2} = 0.2703125$

$\frac{0.2703125}{2} = 0.13515625$

$\frac{0.13515625}{2} = 0.067578125$

$\frac{0.067578125}{2} = 0.0337890625$

$\frac{0.0337890625}{2} = 0.01689453125$

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$\frac{0.001055908203125}{2} = 0.0005279541015625$

$\frac{0.0005279541015625}{2} = 0.00026397705078125$

$\frac{0.00026397705078125}{2} = 0.000131988525390625$

$\frac{0.000131988525390625}{2} = 6.59942627953125 \times 10^{-7}$

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